

Title (en)  
ARRANGEMENT AND METHOD FOR SUPPLYING ENERGY TO BUILDINGS

Title (de)  
ANORDNUNG UND VERFAHREN ZUR ENERGIEVERSORGUNG VON GEBÄUDEN

Title (fr)  
SYSTÈME ET PROCÉDÉ POUR ALIMENTER DES BÂTIMENTS EN ÉNERGIE

Publication  
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Application  
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Abstract (en)  
[origin: WO2013026910A1] The present application relates to an arrangement for supplying energy to detached buildings, comprising - at least one energy-generating installation (1), in particular a photovoltaic installation, for providing an electrical current, - at least one electrolyser (2) for producing hydrogen from water using the electrical current from the energy-generating installation (1), - at least one first chemical reactor (3) for at least partially hydrating at least one substrate with an extended n-conjugated system using the hydrogen formed in the electrolyser (2), - at least one storage tank (4) for storing the substrate hydrated at least partially in the first chemical reactor (3), - at least one second chemical reactor (5) for at least partially dehydrating the at least partially hydrated substrate which was produced in the first chemical reactor (3) and stored in the storage tank (4) with the release of hydrogen, and - at least one fuel cell (6) for the oxidation of the hydrogen released in the second chemical reactor (4) with the release of energy. The present invention likewise relates to a method for supplying energy using this arrangement.

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